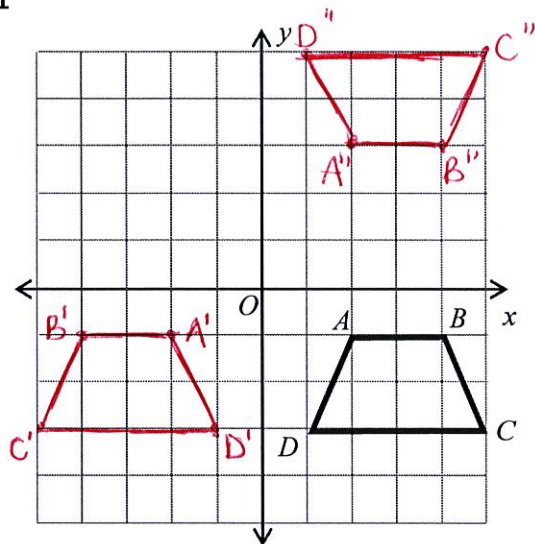


#1



A. Reflect the figure across the y-axis. Name the image $A'B'C'D'$.

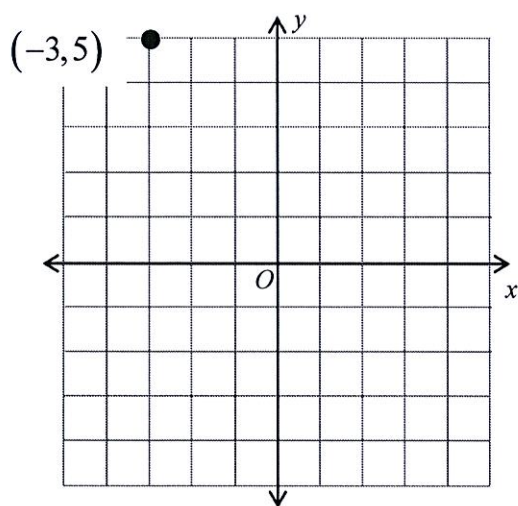
B. Does the image have the same side lengths and angle measurements? Justify your answer.

Yes, reflection is a congruence transformation so the pre-image and image are congruent (same side lengths and angle measurements).

C. If the figure was reflected across the x-axis, then translated two units upward, would the result be the same as the transformation in part a? If not, show where the image would be on the coordinate plane and label it $A''B''C''D''$.

No!

#2



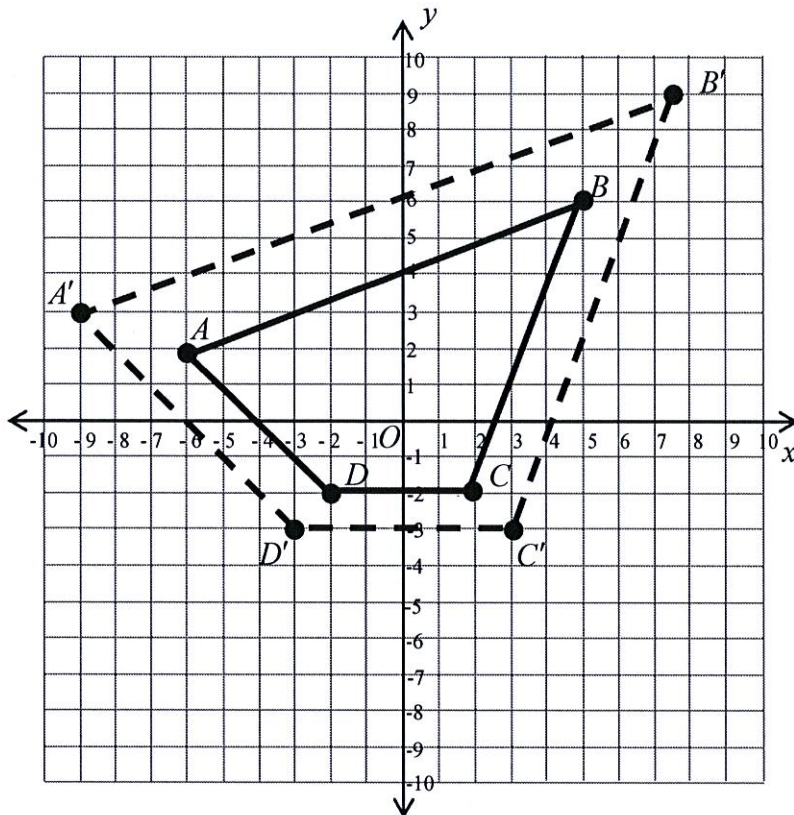
If the pre-image point is $(-3, 5)$, write the coordinates of the image point after it undergoes the following transformations:

- Reflected across the x-axis $(-3, -5)$
- Reflected across the y-axis $(3, 5)$
- Translated seven units to the right and two units downward $[(x+7, y-2)]$ $(4, 3)$
- Rotated counter-clockwise 90 degrees about the origin. $(-5, -3)$
- Rotated 180 degrees about the origin. $(3, -5)$

WLPCS
Geometry

#3

On the graph below, quadrilateral $ABCD$ has been dilated, with the center of dilation the origin, to create quadrilateral $A'B'C'D'$.



- What is the scale factor of the dilation? $\frac{3}{2}$ or 1.5
- What is the ratio of the length of $\overline{A'B'}$ to the length of \overline{AB} ?
 $\frac{3}{2}$ $\left(\frac{6}{4}\right)$
- How are the measures of $\angle A$ and $\angle A'$ related?

They are congruent.